### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection Bay Area Branch

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-006916 Address: 333 Burma Road **Date Inspected:** 03-May-2009

City: Oakland, CA 94607

OSM Arrival Time: 800 **Project Name:** SAS Superstructure **OSM Departure Time:** 1630 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** ZPMC and ABF **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** SAS tower

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. Wai Pau, was present during the times noted above for observations relative to the work being performed.

#### Bay #10 South and North Tower Shop

North tower lift#1:- Caltrans QA Inspector observed six ZPMC welders in process FCAW process on fit lugs of interior diaphragms. The fit lugs located at the elevation 53m to 80.75m diaphragm sections of skin plate D. The minimum preheat and maximum interpass temperature requirements for FCAW process are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

North tower lift#2:- Caltrans QA Inspector observed six ZPMC welders in process FCAW process on interior diaphragms of skin plate D. The interior diaphragms located at the elevation 53m to 80.75m. The minimum preheat and maximum interpass temperature requirements for FCAW process are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

South Tower Lift #2:- Caltrans QA Inspector observed five welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D and B to C. The welding located at elevation 53m to 80. 76m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

# WELDING INSPECTION REPORT

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Bay #11 South and North Tower Shop

West tower lift#1:- Caltrans QA Inspector observed five ZPMC welders in process FCAW process on interior diaphragms of skin plate E. The interior diaphragms located at the elevation 9m to 47.6m. The minimum preheat and maximum interpass temperature requirements for FCAW process welds are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

East Tower Lift #2:- Caltrans QA Inspector observed six welders performed FCAW process on CJP weld for corner diagonal stiffener that connected skin plate C to D. The welding located at elevation 53m to 80.76m diaphragm. The minimum preheat and maximum interpass temperature requirements for FCAW CJP weld are 110C degree and 230 C degree. The FCAW was monitored and recorded by ZPMC and ABF QC inspector. Based on Caltrans QAI observations, no discrepancies were noted.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### **Summary of Conversations:**

As noted within the report above.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod 13482570045, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Clifford, William	QA Reviewer